

## ABSTRACT OF THE DISCLOSURE

A system in a Voice Over Internet Protocol (VOIP) network eliminates false voice detection in voice band data service (e.g., modem or facsimile transmission) by sequentially enabling silence detection then voice detection. In Voice Band Data (VBD) mode, the system initially enables silence detection and disables voice detection. If silence is detected in a VOIP signal associated with a VOIP call, the system enables voice detection. If voice is detected, the system switches from VBD mode to voice mode and enables processing (e.g., echo cancellation and/or data compression) that improves voice communications.